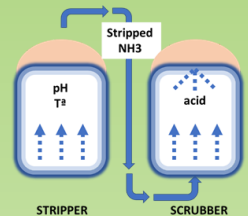


Nutrient Recycling Community



Stripping and scrubbing webinar

Stripping-scrubbing is a technology applied to nitrogen rich liquid fractions to obtain a variety of ammonium-based products. The technology is based on physic-chemical phenomena where an outflow gas saturated in ammonia is obtained (stripping) and is then brought into contact with an acid solution (scrubbing).



Potential fertilising products recovered

Ammonium sulphate(AS)
Ammonium nitrate (AN)

Categories identified within the FPR (2019/1009)

CMC 15 Recovered high purity materials
PFC1(C)(I) Inorganic macronutrient fertiliser

Innovative applications raised by speakers:

- CO₂ supply for increasing pH
- Use of organic acids or waste acids
- Steam stripping systems in industry
- Scrubbing in air washing systems (thermochemical systems, composting...)

Key challenges to be addressed:

- Energy consumption
- Strong acid consumption
- Variability and stability issues in product quality, storage and handling of products.
- Opportunity of precision farming with on-line monitoring systems

Benefits of the use of recovered ammonium products:

- 50–60% of N removal from influent is technically achievable and economically feasible
- Able to achieve similar N concentrations than commercial mineral AS (up to 7% N content). AN obtained equal to low-grade product, used in industry
- Recovered nutrients. Potentially better environmental performance?
- High niche potential in European fertilising market

